

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) Modular support system comprising:

at least four connected pairs of tube-shaped upright elements;

a plurality of C-shaped coupling members respectively positioned at a selected plurality of locations along the length of each upright element, wherein said plurality of C-shaped members at each selected location substantially encompass the circumference of the upright element;

at least one tube-shaped coupling member for mutually connecting each pair of upright elements at the ends thereof into a compact compound element;

at least one adjustable spindle assembly being mounted resistantly to tensile strain attached to the lower and/or upper side of an upright assembly, which spindle assembly is provided with a coupling and anti-flexure part which is also provided with a plurality of C-shaped coupling members substantially encompassing the circumference of the coupling part;

at least four intermediate frames for mutually interconnecting said connected pairs of upright elements, each intermediate frame comprising:

two mutually distantly spaced parallel horizontally positioned girders interconnected by means of lattice elements, whereby each of both free ends of a girder is provided with a coupling device which connects each of the four free ends of the intermediate frame with an adjacent vertical upright element and/or spindle assembly using said C-shaped coupling members, in such a manner, that the modular support system in its assembled position is transportable as a whole and adjustable in height.

2. (Currently Amended) An adjustable spindle assembly mounted to a tube-shaped upright element of a modular support system, the adjustable spindle assembly comprising:

a spindle provided with a thread being capable of carrying a high load, which is provided at its upper end with guiding strips serving for the inner concentric positioning

and mounting of the spindle in a lower and/or upper end opening of the tube-shaped upright element,

a foot element configured to position and anchor a free end of the spindle, the foot element comprising a foot plate which at its upper part is provided with welded vertical reinforcement plates and configured to anchor the free end of the spindle,

a butterfly nut, mounted on the spindle, comprising a hollow cylindrical housing internally provided with screw thread while its bottom part is provided with a plurality of radially protruding handgrips for the adjustment of the upright assembly at the desired height and for fast dismounting by means of its rotation, having mounted on its top side a free rotatable ring, which on its outside is provided with a set of sheet shaped screw holders welded thereto for locking screws for anchoring into the lower end opening of the tube-shaped upright element, in such a way, that the butterfly nut may be mounted to the lower and/or upper side of the upright element without blocking the rotation of the butterfly nut, and

a coupling and anti-flexure piece movably positioned on the spindle between the butterfly nut and the foot element and comprising a hollow cylindrical housing internally provided with guiding strips for its vertical guiding on the spindle, and further provided with four C-shaped coupling members welded on the outer circumference in such a way that in its mounted position one or more intermediate frames may be coupled up on the coupling parts and also on the upright elements thereby considerably reducing the free flexing length of the spindle, in such a way, that the modular support system in its assembled position may be adjusted in height and also may be subjected to a high stress.

3. (Previously Presented) A coupling assembly for use in coupling of intermediate frames on spindle assemblies of a modular support system, the coupling assembly comprising:

at least one coupling device comprising at least an upper claw and a lower claw, each positioned on all four free ends of said intermediate frames; which upper claw in a cross section is constructed as an L-shaped sheet element whereby the longest portion of

the L is welded upon the free upper end of the horizontally positioned girders of the intermediate frame and the shorter part of the L is pointing downward, whereby the lower claw is formed as a loose L-shaped sheet element provided with a hollow cylindrical protrusion being internally threaded and a guide for positioning or centering thereof whereby each lower claw is fixed by a screw member against the free lower side of the horizontally positioned girders of the intermediate frame, which at a certain distance from their free end openings are each internally provided with a guiding tube element for guiding the lower claw;

C-shaped coupling members, positioned on upright elements and/or coupling parts of the spindle assemblies, whereby the inside of said coupling members offers sufficient space for locating therein the specially shaped free end of the upper claw and also the specially shaped free end of the lower claw for intercoupling of the intermediate frames with the upright elements; and

corner struts in an inclined position on two adjacent intermediate frames near the free upper openings thereof;

such that each of the four free end openings of the intermediate frame may be connected into a strong, stable and robust unit with an adjacent other vertical upright element and/or spindle assembly, while preventing twisting of the modular support system in its assembled position.

4. (Previously Presented) A system for mutually coupling two upright elements of a modular support system, the system comprising:

a tube-shaped connecting member comprising a tube profile provided with one or more guides for internal mounting into the upright elements and a ring disposed substantially half way along the length of the tube profile and having a greater outer diameter than the upright element has; and

a locking member for locking the connecting member to the upright elements, wherein the connecting member is provided with pass through openings for receiving a locking pin in such a way that the lower end of the locking member is mounted from the

upside down into an upright element until the ring, whereafter on its upper end a next upright element is located and locked respectively by means of locking pins each with a non-circular oblong body in cross section, which locking pins are each provided with a handgrip which is positioned at a certain mutual distance by means of a perforated rectangular plate welded on said ring, and whereby said mutual distance corresponds to the mutual distance between the passing through openings on both ends of the connecting member and the passing through openings of two upright elements one positioned upon the other in mounted position; which locking pins are each provided with a round head rivet for securing the connection between the locking pin and with the connecting piece and also with the vertical upright elements in such a way that an undesired release of both locking pins and their removal from the sheet shaped pin holder will not be possible.

5. (Previously Presented) The modular support system of Claim 1, wherein the tube-shaped upright element is constructed in steel of standard lengths of 1200 mm, 1800 mm, 2400 mm, 3000 mm, having an outer diameter of approx. 135 mm, and having of a wall thickness of approx. 6mm and being loadable to approx. 250 kN.

6. (Previously Presented) The coupling assembly of Claim 1, wherein the C-shaped coupling and anti-flexure members are constructed from steel C-profile having a length of approx. 50 mm and a thickness of approx. 10 mm.

7. (Previously Presented) The coupling assembly of Claim 3, wherein the downwardly pointing short part of the L of the upper claw of the coupling device which is positioned on the upper girder of the intermediate frame is approx. 10 mm longer than the downwardly pointing short part of the L of the upper claw of a coupling device which is positioned on the lower girder of the intermediate frame.

8. (Previously Presented) The coupling assembly of Claim 3, further comprising a screw member having an oblong screw body having a length of approx. 200 mm

and a pitch of approx. 10 mm, and is provided on its upper side with a butterfly nut for screwing on manually or by means of a suitable tool.

9. (Previously Presented) The modular support system of Claim 1, wherein the intermediate frames are manufactured in standard lengths of 1200 mm, 1800 mm, 2400 mm, 3000 mm.

10. (Previously Presented) The adjustable spindle assembly of Claim 2, wherein the outer diameter of the spindle is approx. 100 mm by a length of the spindle of approx. 1200 mm, approx. ¾ of the total length is provided with quadratic or trapezoid threading, with a pitch of approx. 25 mm, capable of taking high loads.

11. (Previously Presented) The adjustable spindle assembly of Claim 2, wherein the foot element further comprises a solid locking pin having an outer diameter of approx. 40 mm and a length of approx. 180 mm, and a tube element for internally reinforcing of the bottom side of the spindle, whereby said solid locking pin, passing through a borehole having a diameter of approx. 40 mm, is mounted at a distance of approx. 80 mm with respect to the centre of a free bottom end opening of said spindle and further through a borehole positioned at a distance of approx. 70 mm with respect to the centre of the free upper end opening of said foot element, whereby the outwardly extending end of the locking pin is locked by means of a locking clip.

12. (Previously Presented) The adjustable spindle assembly of Claim 2, wherein the foot element further comprises a square shaped steel plate with a thickness of approx. 15 mm and having a side length of approx. 300 mm and having two symmetrical positioned vertical walls welded thereon each having a thickness of approx. 15 mm, each side wall comprising rectangular central part, provided with a reinforcement plate welded thereupon having a borehole, located on both sides of the rectangular central part of the wall and under an angle of approx. 135° inclined downwardly.